DEPARTMENT OF COMMERCE BUREAU OF AIR COMMERCE Washington

STATEMENT OF PROBABLE CAUSE CONCERNING AN ACCIDENT WHICH OCCURRED TO A PRIVATELY OWNED AIRPLANE NEAR DUNLO, PENNSYLVANIA, ON APRIL 19, 1936

To the Secretary of Commerce:

On April 19, 1936, at approximately 2:18 p.m., in the vicinity of Dunlo, Pennsylvania, a privately owned and operated airplane crashed with resultant death to the pilot and passenger and the complete destruction of the aircraft.

The airplane, a Beechcraft, model B17R, bore Department of Commerce license number NC-281Y and was owned by the pilot. The pilot. Frederick H. Harvey, held a Department of Commerce transport pilot's license. The passenger was Elizabeth E. Harvey, wife of the pilot.

Pilot Harvey, in the course of a flight from New York to Kansas City, landed about 12 noon at the Duncansville, Pennsylvania, airport. He reported icing conditions over the route he had flown and checked weather conditions over his contemplated route by contacting the TWA operations office at Pittsburgh. Weather reports furnished him at that time indicated dangerous flying conditions over the route between Duncansville and Pittsburgh, including dense fog and icing conditions and clouds to 7000 or 8000 feet. He was advised by air line personnel not to attempt to fly through this weather to Pittsburgh, but, if he decided to continue his flight, to either detour around this bad area by flying to the northeast to the Newark-Cleveland airway and follow this to Cleveland, or, if local conditions permitted, to climb through an open spot in the clouds until above them and to remain above the clouds and icing condition until in the vicinity of Pittsburgh, where there was ample ceiling to let down under the clouds. Air line airplanes continued to operate through this area. However, they were equipped with de-icers and vacuum driven instruments. The pilot of another privately owned airplane, landing at Duncansville at about the same time, decided not to continue to Pittsburgh in the face of existing weather conditions.

Pilot Harvey elected to attempt the flight, apparently intending to fly above the clouds to a point beyond the dangerous area. He took off at about 2:00 p.m., climbing up into what appeared to be an open spot over the airport. At an altitude of about 3000 feet, the airplane was seen to disappear in the clouds, headed in the direction of Pittsburgh. It is probable that the pilot intended to continue climbing until above the clouds while flying in the direction of his destination rather than climb above the clouds through the open spot.

When next reported, the airplane had crashed near Dunlo, Pennsylvania, about 20 miles from Duncansville and about 10 miles south of a true course from Duncansville to Pittsburgh. It had struck a high tension line, evidently in a fairly steep angle, as the trees were not disturbed and indications pointed to the path of flight as being at a right angle to the power line. The four wing tips, pieces of fabric, pieces of plywood and rib parts were found in a general easterly direction in a comparatively straight path for a distance of two and one-half miles.

There was no evidence that the airplane had struck a tree or other objects prior to striking the power line. The instruments were so badly damaged by fire that nothing could be learned from them. The tail group, all interplane struts and all flying and landing wires were found in the wreckage. No parts of the ailerons were found with the wreckage. From all indications, the airplane dived at an excessive speed which imposed a breaking load on the airplane or induced a destructive flutter.

There were no witnesses to the accident and there is no way of determining just how steeply the airplane dived or how high it was when difficulties were first experienced. It is believed that the dive, and subsequent accident, was due either to a large quantity of ice forming on the airplane or the failure of some essential navigational instrument due to ice, or both.

It is the opinion of the Bureau of Air Commerce that the probable cause of this accident was an inadvertent dive to excessive speed with resultant destruction of the airplane in the air.

Respectfully submitted,

Eugene L. Vical
Director of Air Commerce